

What is claimed is:

1. A shaping process for producing moldings with at least one surface which has self-cleaning properties and has elevations formed by microparticles, by thermal shaping of materials comprising organic compounds, which are used as molding composition, by means of a mold, characterized in that, prior to the thermal shaping, microparticles which have hydrophobic properties and have been accreted from primary particles to give agglomerates or aggregates whose size is from 0.2 to 100 μm are applied to the inner surfaces of the mold, and then the molding composition to be processed, which is in softened or molten form, is molded by means of this mold, where at least 50% of the microparticles are impressed only to an extent of not more than 90% of their diameter into the surface, which has not yet solidified, of the molding, and are firmly held by the molding composition when it solidifies, and are thus anchored.
2. The process as claimed in claim 1, characterized in that the thermal shaping process has been selected from blow molding, extrusion blow molding, extrusion stretch blow molding, injection blow molding, injection stretch blow molding, thermoforming, vacuum stretch forming, pressure stretch forming, and rotary thermoforming.
3. The process as claimed in claim 1 or 2, characterized in that the microparticles are applied to the mold by spraying.

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4. The process as claimed in claim 3,
characterized in that
the microparticles are applied to the molding tool
by applying, to the mold, a suspension which
comprises microparticles and comprises a solvent,
and then evaporating the solvent.
5. The process as claimed in claim 3,
characterized in that
the microparticles are applied to the mold by
applying an aerosol which comprises microparticles
and comprises a propellant gas.
6. The process as claimed in at least one of claims 1
to 5,
characterized in that
the microparticles used have been selected from
particles of silicates, of minerals, of metal
oxides, of metal powders, of silicas, of pigments,
and of polymers.
7. The process as claimed in at least one of claims 1
to 6,
characterized in that
the microparticles used are hydrophobicized fumed
silicas.
8. The process as claimed in at least one of claims 1
to 7,
characterized in that
the material used as organic compounds comprises a
natural rubber or a synthetic rubber, or a
vulcanized rubber, or, as a mixture or
individually, and as homopolymer or copolymer,
polynorbornene, or poly-4-methyl-1-pentene, or
polyisobutene, or acrylonitrile-butadiene-styrene
terpolymers, or polyvinylidene fluoride, or

polyalkylene terephthalates, or polyacrylonitrile, or polyether sulfones, or polyesters, or polystyrenes, or cyclic polyalkenes, or aliphatic linear or branched polyalkenes, or polypropylenes, or polyethylenes, or polyvinyl chloride, or polyamides, or polymethacrylates, or polyacrylates, or polycarbonates, in a polymer or polymer blend.

9. The process as claimed in at least one of claims 1 to 8,
characterized in that
the microparticles are pressed into and anchored into the surface of the molding, where this surface has not yet solidified and where this surface is the surface of a melt of a material to be molded.
10. The process as claimed in at least one of claims 1 to 8,
characterized in that
the microparticles are pressed into and anchored into the surface of the molding, where this surface has not yet solidified and where this surface is the softened surface of a material to be molded.
11. A molding with at least one surface which has self-cleaning properties and has surface structures with elevations, produced by a process as claimed in any of claims 1 to 10.
12. The molding as claimed in claim 11,
characterized in that
the elevations have an average height of from 20 nm to 25 μm and an average separation of from 20 nm to 25 μm .

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13. The molding as claimed in claim 12,
characterized in that
the elevations have an average height of from
50 nm to 4 μ m and/or an average separation of from
50 nm to 4 μ m.
14. The molding as claimed in any of claims 11 to 13,
characterized in that
the microparticles have been selected from
particles of silicates, of minerals, of metal
oxides, of metal powders, of silicas, of pigments,
and of polymers.
15. The molding as claimed in any of claims 11 to 14,
characterized in that
the impressed particles have been anchored with
from 10 to 90% of their average particle diameter
within the surface.
16. The molding as claimed in at least one of claims
11 to 15,
characterized in that
the molding is a three-dimensional article
selected from vessels, lampshades, buckets,
bottles, tires, automotive tires, storage vessels,
drums, dishes, measuring beakers, funnels, tanks,
splash guard components, discharge aids, and
housing parts.